

# MINIATURE INDICATOR

## Model MI57D

### FEATURES:

- No power drain
- Magnetic Latching
- Positive Indication
- Excellent visibility
- Fast response
- High sensitivity

The MINELCO series MI57D is an internal-flag, magnetic-latching indicator that **requires only pulse power for operation**. The flag is positively held in position and will reverse only when a reverse-polarity pulse is applied to the same coil, or a similar polarity pulse is applied to the reset coil.

The small-size indicator has high latching capabilities to provide positive indication under shock and vibration. It will provide fast response in any position and offers excellent visibility in a strong, incident light. The unit is sealed and is impervious to humidity and dust salt spray.

### ELECTRICAL SPECIFICATIONS:

Input Voltage: Standard are 28 volts d-c, 12 volts d-c, and 6 volts d-c. Other voltages available on special order.

ACTUAL SIZE

Coil Resistance: 28 volts d-c = 800 ohms  
12 volts d-c = 145 ohms  
6 volts d-c = 37 ohms } either coil

Resistance Tolerance:  $\pm 10\%$

Pulse Energy required to change indication: 25 mw/sec. maximum at rated voltage.

### ENVIRONMENTAL SPECIFICATIONS:

Operating Temperature:  $-65^{\circ}\text{C}$  to  $\pm 125^{\circ}\text{C}$ .

Shock: Exceeds 50 G with no false indication.

Vibration: 20 G through excursion 5 to 2,000 cps with no false indication. Constant amplitude is below 60 cps.

NOTE: The indicator should not be mounted near a strong, magnetic field as found with a vibration table. False indication will occur. A steel mounting nut will counteract the effects of the magnetic field when vibration testing.

### MECHANICAL SPECIFICATIONS:

Indication: 2 position, black and white and white standard, other color combinations on special order.

Size: 0.593 diameter x 0.622 length,  $\pm 0.005$ "

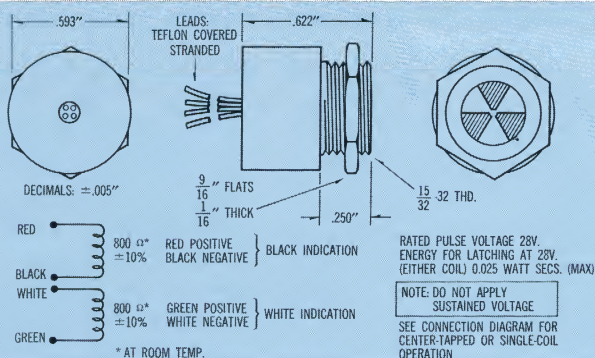
Weight: 0.2 ounce (including standard leads and mounting nut).

Case: Anodized aluminum.

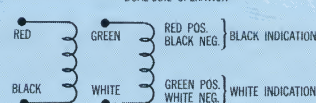
Mounting: Back-of-panel, 15/32-32 thread.

Leads: Teflon insulated, eight inches standard.

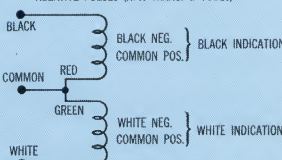
MIL-SPECS: MIL-E-5272C (where applicable).



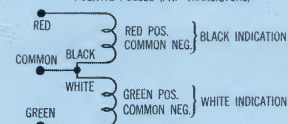
MI57D CONNECTION DIAGRAM  
DUAL-COIL OPERATION



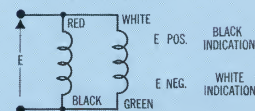
CENTER-TAPPED OPERATION  
NEGATIVE PULSES (NPN TRANS. & TUBES)



CENTER-TAPPED OPERATION  
POSITIVE PULSES (PNP TRANSISTORS)



SINGLE-COIL OPERATION



# MINELCO<sup>®</sup>

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REPRESENTED BY: